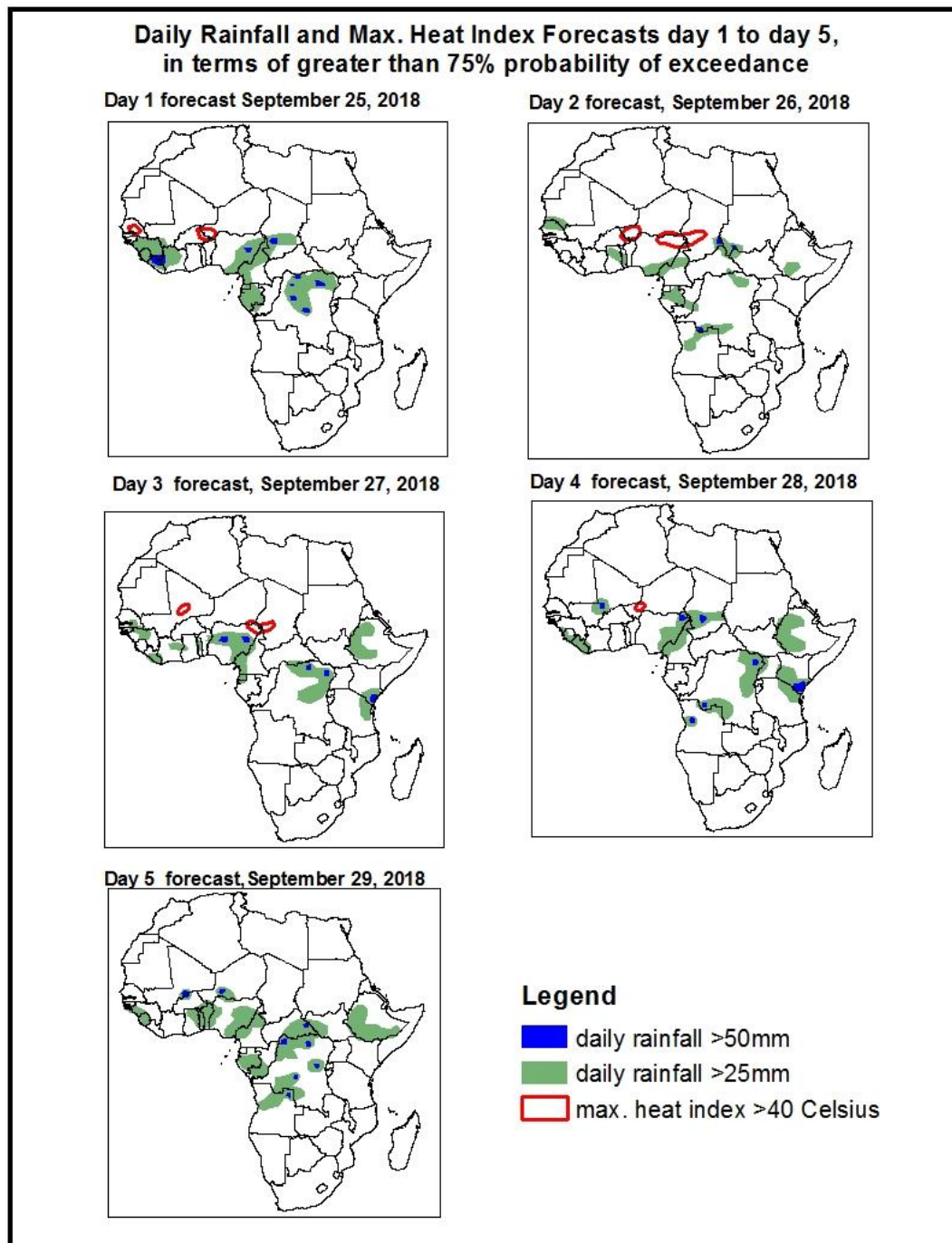


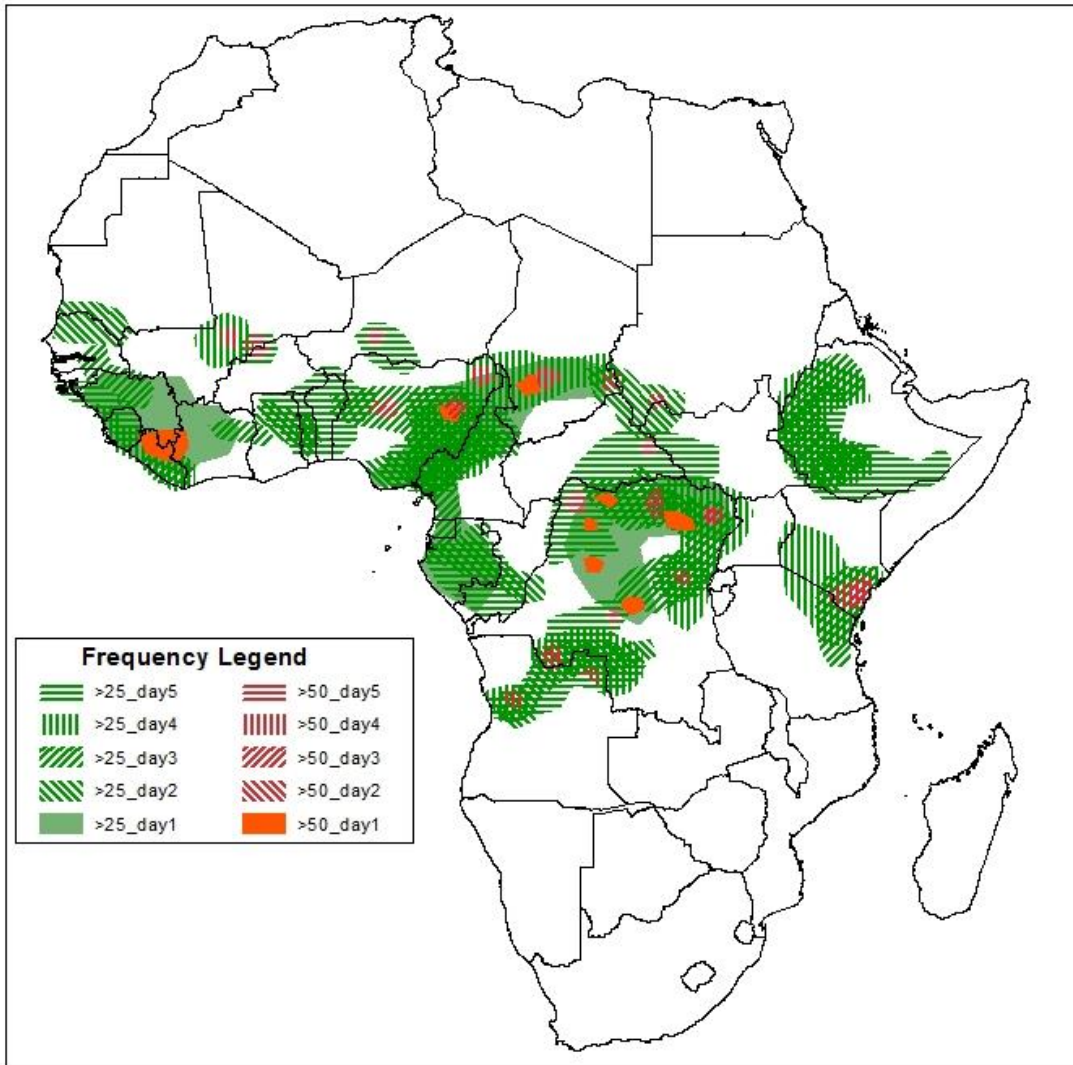
1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on *September 24, 2018*)

1.1. *Daily Rainfall and Maximum Heat Index Forecasts* (valid: *Sep 25, – Sept 29, 2018*)

The forecasts are expressed in terms of high probability of precipitation (POP) and high probability of maximum heat index, based on the NCEP/GFS and the NCEP Global Ensemble Forecasts System (GEFS) and expert assessment.



Five Days Rainfall Forecast Summary 25 - 29 September, 2018.

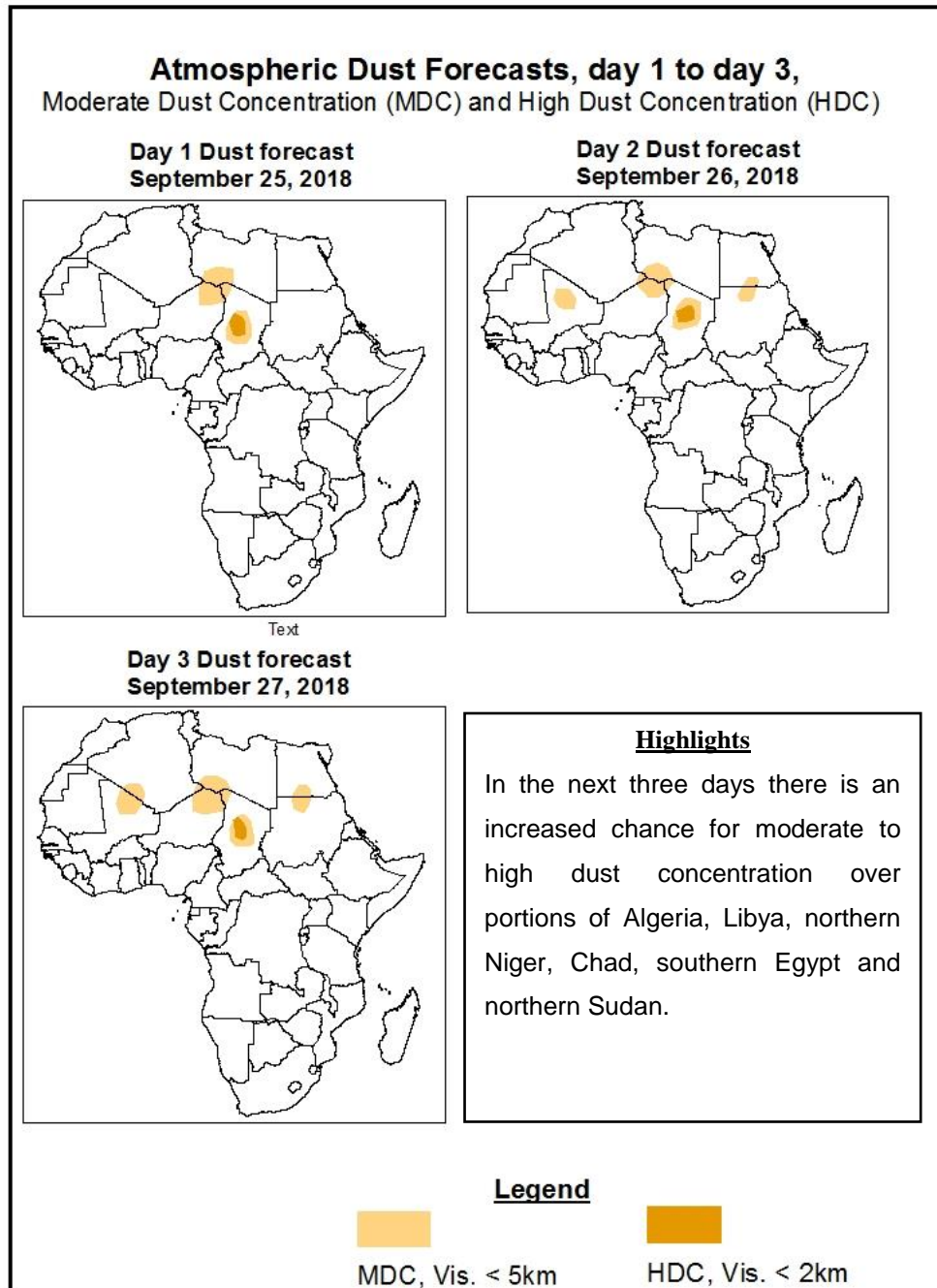


Highlights

- In the next five days, tropical/extratropical interaction across northwestern Africa, lower-level cyclonic systems along the Gulf of Guinea coast and localized lower-level wind convergences over Sahel region, active lower-level wind convergences in the Congo Basin, Sudan, and Ethiopia, and active East African Monsoon are expected to enhance rainfall.
- There is an increased chance for 2 or more days of moderate to heavy rainfall over portions of the Gulf of Guinea countries and the neighboring areas of the Sahel region, DRC, parts of Sudan, South Sudan, Ethiopia, and southeastern Kenya and northeastern Tanzania..
- There is an increased chance for temperature heat index values to exceed 41⁰C over local areas in Senegal, Mauritania, Niger, Nigeria, Chad and DRC.

1.2. Atmospheric Dust Concentration Forecasts (valid: September 25 – September 27, 2018)

The forecasts are expressed in terms of high probability of dust concentration, based on the Navy Aerosol Analysis and Prediction System, NCEP/GFS lower-level wind forecasts and expert assessment.



1.3. Model Discussion, Valid: September 25 – September 29, 2018

The Azores High Pressure system over the North Atlantic Ocean is expected to weaken. Its central pressure value is expected to decrease from 1041hPa to 1032hPa during the forecast period.

The St. Helena High Pressure system over the Southeast Atlantic Ocean is expected to intensify gradually. Its central pressure value is expected to increase from 1024hPa to 1027hPa through 120 hours.

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The Mascarene High Pressure system over the Southwest Indian Ocean is expected to intensify gradually. Its central pressure value is expected to increase from 1027hPa to 1032hPa.

Thermal lows over northern Mali and Chad are expected to maintain average central pressure values of 1007hPa and 1009hPa, respectively.

At 925hPa, dry strong northeasterly to easterly flow is expected to prevail over Western Sahara, Mauritania, northern Mali, parts of Algeria, Chad, Libya, northern Niger, and portions of Egypt and Sudan . In contrast, moist southwesterly to westerly monsoon flow from the Atlantic Ocean is expected to remain active along the Gulf of Guinea coast. Active East African monsoon flow from the Indian Ocean, with its associated lower-level convergence across equatorial eastern Africa is expected to prevail during the forecast period.

At 850hPa, a cyclonic trough is expected to prevail along the Gulf of Guinea coast during the forecast period. Lower-level wind Convergence across portions of the Sahel region, Sudan and Ethiopia and seasonal wind convergence in the Congo Basin are expected to remain active during the forecast period.

At 700-hPa, an area of strong easterly flow is expected to prevail across many places in the Gulf of Guinea countries during the first half of the forecast period.

In the next five days, tropical/extratropical interaction across northwestern Africa, lower-level cyclonic systems along the Gulf of Guinea coast and localized lower-level wind convergences over Sahel region, active lower-level wind convergences in the Congo Basin, Sudan, and Ethiopia, and active East African Monsoon are expected to enhance rainfall. There is an increased chance for 2 or more days of moderate to heavy rainfall over portions of the Gulf of Guinea countries and the neighboring areas of the Sahel region, DRC, parts of Sudan, South Sudan, Ethiopia, and southeastern Kenya and northeastern Tanzania. There is an increased chance for temperature heat index values to exceed 41⁰C over local areas in Senegal, Mauritania, Niger, Nigeria, Chad and DRC.

2.0. Previous and Current Day Weather over Africa

2.1. Weather assessment for the previous day (September 23, 2018)

Moderate to locally heavy rainfall was observed over parts of Algeria, Mali, Guinea, Sierra Leone, Liberia, Cote d'Ivoire, Ghana, Niger, Nigeria, Cameroon, Equatorial Guinea, Gabon, Congo, Angola, DRC, CAR, Tanzania, South Sudan and Sudan.

2.2. Weather assessment for the current day (September 24, 2018)

Intense convective clouds are observed over parts of Mauritania, Senegal, Mali, Guinea, Sierra Leone, Liberia, Nigeria, Cameroon, Equatorial Guinea, Gabon, DRC, CAR, Uganda, South Sudan, Sudan, Ethiopia and Lesotho.

